

## REVISION OF THE AMYCTERIDES.

PART VII. *Hyborrhynchus* and Allied Genera.

By EUSTACE W. FERGUSON, M.B., Ch.M.

The present part deals with a small group of genera which present affinities both with the *Acantholophus-Cubicorrhynchus* and with the Euomid complexes. The genera here considered include *Hyborrhynchus* and *Anascoptes* and two new genera proposed for species formerly included in *Hyborrhynchus*.

These four genera possess one feature in common, in that the elytra are so shaped at the base that the distance between the ends of the third interstices is equal in width to the base of the prothorax. The only other genus known to me possessing this character is *Dialeptopus*, which is very dissimilar in other respects from *Hyborrhynchus* and its allies.

In its general appearance *Hyborrhynchus* shows considerable resemblance to *Acantholophus*, while *Anascoptes* is more suggestive of the next group—the *Euomides*. Both these genera have the elypeal plate not deeply sunken but more or less prominently placed at the apex of the rostrum, a character found in most Euomid genera. In the remaining two genera the elypeal plate is contained between the anterior ends of the lateral ridges, though not as deeply sunken as in most of the genera already dealt with in this revision.

The group seems thus to form a connecting link between these genera and the *Euomides*, if indeed these last can be regarded as a separate division of the subfamily.

In its distribution the group appears essentially western and is mostly found in the South West corner of the continent, though one species extends as far east as Sydney.

The following table will enable the four genera to be distinguished.

*Table of Genera.*

1	(6)	Upper surface of rostrum deeply excavate.	
2	(5)	Scrobes extending back to eyes.	
3	(4)	Prothorax with lateral margins spinose . . . . .	HYBORRHYNCHUS
4	(3)	Prothorax elongate, lateral margins not spinose . . . .	NEOHYBORRHYNCHUS
5	(2)	Scrobes ending at some distance in front of eyes . . .	PARAHYBORRHYNCHUS
6	(1)	Upper rostral surface not deeply excavate, at most feebly concave at base	ANASCOPTES

## HYBORRHYNCHUS.

Macleay, Trans. Ent. Soc. N.S. Wales, i., 1865, p. 295.

Small, elongate, spinose species, in general facies resembling small species of *Acantholophus*.

Head with supraorbital tubercles and generally frontal granules or tubercles. Rostrum short, about as wide as head, deeply excavate above, with the clypeal plate more or less exerted; with a prominent tubercle on each lateral margin, and in most species with a pair of large basal tubercles, corresponding in position to the internal ridges. Antennae slender; scape long. Eyes rotundate or subrotundate, rather coarsely faceted. Prothorax shaped as in *Acantholophus*, the apical margin more or less produced above; without ocular lobes; disc with median and sublateral areas separated by the submedian rows of tubercles; lateral margins tuberculate, the tubercles either one or two in number, outwardly projecting. Elytra elongate, narrow in ♂, broader in ♀; apex more or less deeply emarginate and bimucronate; base contained between the advanced ends of the third interstices; disc striate punctate with two or three rows of tubercles, the third row sometimes reduced to a single infrahumeral tubercle or spine. Venter more or less flattened in ♂, convex in ♀; the intermediate segments moderately long; the apical segment without excavation. Legs moderately long and slender; tarsi of moderate length.

Though in general appearance resembling the smaller species of *Acantholophus*, the present genus may be readily distinguished by the relation of the bases of the prothorax and elytra. The arrangement of the rostral tubercles is also different, the large basal pair not being found in *Acantholophus*. The presence of these is however not absolutely constant in *Hyborrhynchus*, and the arrangement of the head and rostral tubercles affords good specific features.

The species are very similar in appearance but are all readily separated, partly on the characters of the above-mentioned tubercles, but partly also on the arrangement of the lateral prothoracic and of the elytral tubercles.

*History*.—The genus *Hyborrhynchus* was proposed in 1865 by William Macleay for the reception of one species previously placed in *Acantholophus*—*coenosus* Bohem.—and of three new species—*furcatus*, *maculatus* and *rugosus*. Subsequently, in 1866, Macleay added 4 further species—*mastersi*, *prodigus*, *crassiusculus* and *bicornutus*.

*H. coenosus* Bohemann was originally described (Schonh. Gen. Spec. Cure., vii. (1), 1843, p. 80) under the genus *Amycterus*. In 1846 Schonherr included it in *Acantholophus*, then first formally described (Mantissa secunda Cure., p. 57), though the species is not mentioned by name, only the number (50) of its place in the original publication being given. The species was also included in the table of the genus *Acantholophus* given by G. R. Waterhouse (Trans. Ent. Soc., N.S., iii., 1854, p. 2).

This species I would now select as the genotype of *Hyborrhynchus*, not because it is the earliest described species referable to the genus, but because Macleay in describing *H. furcatus* (the first species described by him) based his description on the sexes of two species, one of them being the species (*maculatus*) next in order. The question of the allotment of these names is discussed under *H. furcatus*.

The third species (*rugosus*) is here made the type of a new genus.

Of the 4 species added by Macleay in 1866, two—*mastersi* and *crassiusculus*—are now removed to a new genus.

Only one species has been described of recent years—*aurigena* Blackb. (Trans. Roy. Soc. S. Aust., 1899, p. 89). This I have already removed to *Cubicorrhynchus* (Proc. Linn. Soc. N.S. Wales, 1916, xli., part 3, p. 452). One new species is added in the present paper, making a total of 6 species at present known. *Acantholophus conrexiusculus* Mael. was provisionally referred to *Hyborrhynchus* in the previous part of this revision. It is here referred to a

new genus, proposed to receive it and the species—*H. mastersi* Macl., and *H. crassiusculus* Macl.—mentioned above.

*Table of Species.*

- 1 (10) Basal rostral tubercles strongly developed, acute.
- 2 (7) Supraorbital tubercles long, more or less acute.
- 3 (6) Prothorax with the tubercle anterior to subapical constriction not abnormally developed.
- 4 (5) Postero-lateral tubercle of prothorax present . . . . . *H. coenosus* Bohem.
- 5 (4) Postero-lateral tubercle absent . . . . . *H. prodigus* Macl.
- 6 (3) Prothorax with a long spine anterior to subapical constriction  
*H. aculeatus* n. sp.
- 7 (2) Supraorbital tubercles small, obtuse.
- 8 (9) Both sexes with a median pale vitta on elytra bifurcate at edge of declivity . . . . . *H. furcatus* Macl.
- 9 (8) Male with several narrow vittae, female maculate . . . . . *H. maculatus* Macl.
- 10 (1) Basal rostral tubercles small, granuliform . . . . . *H. bicornutus* Macl.

*Note.* I have followed the usual spelling of the name of the genus. Macleay however used *Hyborhynchus*. The emendation appears to have been made by Pascoe and is adopted in Masters' Catalogue.

HYBORRHYNCHUS COENOSUS Bohem.

*Amycterus coenosus*, Bohemann, Schonh. Gen. Spec. Curc., vii., (1), 1843, p. 80; *Hyborhynchus coenosus*, Macl., Trans. Ent. Soc. N.S. Wales, i., 1865, p. 297.

♂. Elongate, narrow; clothed with rather dense brownish subpubescence.

Head with frontal tubercles small; supraorbital tubercles moderately long, erect. Rostrum excavate above; lateral margins triangularly raised in a short tubercle; basal tubercles large and erect. Antennae with first joint of funicle slightly shorter than second. Eyes rotundate. Prothorax slightly produced above, without evident ocular lobes; disc flattened; median area depressed, obsolete granulate; submedian tubercles small, noduliform, irregularly set, the median ones more outwardly placed; lateral margins bituberculate, the tubercles elongate, trianguliform, the anterior longer than the posterior.

Elytra parallel-sided, with apex strongly bimucronate; base with forward projecting tubercles on the first and third interstices; punctures obscured by clothing; with two rows of tubercles, situated on the third and fifth interstices; first row with a large conical tubercle or spine at humeral angle, followed by about six tubercles, the anterior ones small and noduliform, the posterior three or four conical and spiniform, the last much the largest and projecting back over the declivity; second row on fifth interstice about 5 in number, forming the lateral margin, the first tubercle large and spiniform, the second smaller but spiniform, the others becoming progressively larger, the last very long, situated on a lower level than the apical tubercle of the first row; seventh interstice with a small infra-humeral tubercle.

Venter flat, densely covered with brown depressed clothing. Legs elongate, slender.

♀. Larger, with wider elytra in comparison with prothorax; head and prothorax similar; elytral tubercles slightly smaller; venter feebly convex.

*Dimensions:* ♂. 11 x 4 mm.; ♀. 13 x 4.5 mm.

*Hab.*—Western Australia: Swan R. (Bohemann), King George Sound (Macleay). The locality, Swan R., given in the original description is probably equivalent to Swan River Colony.

The frontal tubercles are hardly more than granules and may be obsolete.

The species is nearest to *H. prodigus* MacL., but may be distinguished by the postero-lateral prothoracic spine being developed, and by there being only two rows of tubercles on the elytra.

*HYBORRHYNCHUS PRODIGUS* MacL.

Macleay. Trans. Ent. Soc. N.S. Wales, i., 1866, p. 333.

♂. Elongate, narrow; densely clothed with greyish subpubescence, elytra with a median brown vitta, maculate with white, sides of prothorax bivittate, and lower margin of elytra vittate with white.

Head similar to *H. coenosus*, but supraorbital crests longer and more acute. Rostrum with marginal and basal tubercles also much longer and more acute, the basal ones farther apart. Prothorax similar; submedian tubercles narrower and more erect; lateral margins with a single anterior spine, the posterior obsolete.

Elytra similar to *H. coenosus*; punctures more regular and distinct; third interstice with a row of about nine tubercles, the humeral and last two or three acutely spiniform, the apical ones long, projecting backwards, the others smaller but conical and more distinct than in *H. coenosus*; fifth interstice with six tubercles somewhat more slender and acute than in *H. coenosus*; seventh interstice with a moderately large infra-humeral spine, followed by a row of three small spiculiform tubercles.

Venter with brown clothing and a median vitta of white. Legs long and slender.

♀.—Head, rostrum and prothorax similar. Elytra noticeably broader with apical mucronations nearer and not divergent; tubercles slightly smaller. Venter gently convex.

*Dimensions*: ♂. 10.5 x 4 mm.; ♀. 11.5 x 5 mm.

*Hab.*—Western Australia: King George Sound.

The differences between this species and its nearest ally—*H. coenosus*—are given under that species. It might be added that the supraorbital and rostral spines are longer than in *H. coenosus*.

The above description was drawn up from the Macleay Museum specimens, which are probably the types.

*HYBORRHYNCHUS ACULEATUS*, n. sp.

♂. Small, elongate, very strongly spinose. Black; clothing abraded.

Head somewhat flattened in front; frontal tubercles absent; supraorbital tubercles long, acute, erect. Rostrum concave above; marginal tubercles rather short, but erect and acute; basal tubercles widely separated, long and acute.

Prothorax strongly produced over head; submedian row with the first tubercle produced as a long spine projecting far over the head, the remaining tubercles small but conical, not quite in a straight line; lateral margins with two strong outwardly projecting spines, the anterior in front of the subapical constriction, with a strong forward inclination, the second representing the antero-lateral spine, with a slighter forward inclination; two small granules present posterior to middle.

Elytra narrow, widest anterior to middle; base with forward projecting spines at the ends of the first and third interstices; apex with a strong spine on each side; punctures moderately large and deep; granules not traceable; with two rows of tubercles, the first row on the third interstice consisting of

3-4 small spiniform granules extending backwards from the humeral spine, followed by two or three short conical spines with a long acute spine on the edge of the declivity; second row on fifth interstice consisting of 5 spines, the first large, acute, projecting outwards and somewhat forwards, the following 3 smaller but acute, the apical one very long and acute, situated at a lower level than apical tubercle of first row: seventh interstice with a strong intra-humeral spine.

Venter flattened; more or less densely covered with brown depressed clothing, with a narrow median white vitta. Legs simple. *Dimensions*: ♂. 8 x 3.5 mm.

*Hab.*—Western Australia. Described from a single male, not in too good preservation, in the Macleay Museum collection.

This species differs widely from any of the other members of the genus and perhaps should be separated generically; the arrangement of the head and rostral tubercles is however similar. *H. aculeatus*, though the smallest species known, has longer spines than any of the others. It may be recognised by the long spines projecting from the prothorax over the head, and by the long spine on the side of the prothorax, in front of the subapical constriction.

#### HYBORRHYNCHUS FURCATUS Mael.

Macleay, Trans. Ent. Soc. N.S. Wales, i., 1865, p. 296.

♂. Narrow, elongate. Black; clothing dusky, inconspicuous, median line of elytra with a mixed white and brown vitta, furcate at declivity and extending on to inner sides of the apical tubercles of first row.

Head with frontal and supraorbital tubercles small and noduliform, not quite in a straight line across the head, the supraorbital somewhat larger than the frontal. Rostrum widely excavate above; the lateral margins raised, angulate, but hardly tuberculate; basal tubercles large, erect, conical, moderately closely approximated. Antennae with second joint of funicle longer than first.

Prothorax slightly produced over the head; submedian tubercles noduliform, not in single series, partially united to form a low, irregular ridge on either side of median area, the posterior pair rather strong and projecting backwards; lateral margins bituberculate, the anterior tubercle strong, subtriangular, the posterior smaller and obtuse.

Elytra parallel-sided; base with short, forward projections at the ends of the first and third interstices; apex emarginate, briefly mucronate on each side; sculpture somewhat confused, punctures moderately large, less regular than in *H. maculatus*; with three rows of tubercles; first row with 7, the basal one large and conical, situated at humeral angle, the intermediate ones erect, obtuse nodules, becoming larger posteriorly, the apical tubercle large and acute; second row with 5-6 strong conical tubercles, the first and the last two larger than the others, the apical tubercle reaching a lower level than that of first row; seventh interstice with a strong, conical, infra-humeral tubercle, followed by a row of 3-4 smaller tubercles. [Venter missing]. Legs simple.

♀. With clothing as in ♂, but median bifurcate vitta even more strongly marked. Elytra broader with apex more widely emarginate; tubercles smaller and more obtuse. Venter rather feebly convex; moderately densely clothed with brown, with scattered whitish decumbent setae.

*Dimensions*: ♂. 11 x 4 mm.; ♀. 12 x 5 mm.

*Hab.*—Western Australia: King George Sound.



The above description of the male is taken from a specimen in my own collection. The male described by Macleay, now in the Macleay Museum, is not the same species as the female described, but belongs to the next species—*H. maculatus* Macl. It may be that the male should be regarded as the holotype of the species, in which case the name *maculatus* would fall as a synonym of *furcatus*, while a new name would be required for the present species. I do not propose to follow this procedure as it is abundantly evident from the specific names, and also from his comments, that Macleay distinguished the two species on the differences between the two females, and I would suggest that this sex be regarded as the holotype of *H. furcatus*, thus preserving both names.

The two species are closely allied but the clothing is quite distinct, and the general sculpture is rougher in *H. furcatus*.

Both species may be distinguished from the other members of the genus by the small supraorbital tubercles. They are also separable from the other species on the form of the submentum. In *H. furcatus* and *H. maculatus* the buccal emargination is straight whereas in the other species there is a strong tongue-shaped median lobe projecting into the aperture from the submentum. This lobe occurs also in *Anascoptes* and in other widely separated genera, and its significance is uncertain. The submentum was not examined in *H. aculeatus*.

#### HYBORRHYNCHUS MACULATUS Macl.

Macleay, Trans. Ent. Soc. N.S. Wales, i., 1865, p. 297.

♂. Small, narrow. Clothed with dark brown pubescence, prothorax with a median golden brown vitta, sides with a dense white vitta above; elytra with golden brown vittae between the rows of tubercles and on lateral interstices, the lowest interstice with a white vitta, declivity with a single, mainly white, vitta on each side.

Head with tubercles as in *H. furcatus*; rostrum similar but with external margins less strongly angulate, and basal tubercles slightly smaller. Antennae with the first two joints of the funicle subequal.

Frothorax much as in *H. furcatus*; submedian tubercles smaller, not conjoined; lateral tubercles somewhat more acute.

Elytra parallel-sided; apex widely emarginate, more strongly mucronate on each side; punctures more regular, in definite striae; with three rows of tubercles, first row on third interstice composed of 7-9 tubercles, for the most part small, becoming larger posteriorly, the basal tubercle also slightly larger, the apical much larger and acutely conical; second row with 6-7 erect, conical tubercles, the basal slightly larger than the ones following it, the two last larger and acute, the apical reaching a lower level than that of first row; seventh interstice with a conical infra-humeral spine and one or two small granuliform tubercles.

Venter flat, rather sparsely clothed with brown, with a median white vitta on the basal segments. Legs simple.

♀. Thickly clothed with light brown pubescence, strongly maculate with white, appearing obscurely vittate from certain directions.

Head, rostrum and prothorax as in male.

Elytra broader, with tubercles much debased, the first row about 8 in number, hardly larger than granules, the last longer and conical; second row with about 9, mostly small granules, the basal tubercle larger, the last two larger and more conical, the apical one in line with those on seventh interstice; third row with a small but definite infra-humeral tubercle and 3-4 small granules.

Venter clothed with brown pubescence, with a median white vitta, and traces of lateral vittae.

*Dimensions*: ♂. 9.5 x 3 mm.; ♀. 11 x 4.5 mm.

*Hab.*—Western Australia: King George Sound.

This species is commented on under the preceding one—*H. furcatus* Mael.

HYBORRHYNCHUS BICORNUTUS Mael.

Macleay, Trans. Ent. Soc. N.S. Wales, i., 1866, p. 333.

♂. Elongate, narrow; densely clothed with brown and grey subpubescence; sides with white clothing, irregularly arranged on prothorax, forming two incomplete vittae on elytra.

Head somewhat depressed in front; frontal tubercles absent; supraorbital tubercles large and conical. Rostrum widely excavate above, lateral margins raised into a strong triangular tubercle; basal tubercles small and granuliform, moderately close together. Antennae with second joint of funicle longer than first.

Prothorax produced over head above; submedian tubercles with the apical one moderately strong, projecting upwards and forwards, followed by a row of 3 or 4 obtusely conical erect tubercles in single series, diminishing in size towards base; lateral margins with a moderately strong tubercle in front of anterior constriction, the antero-lateral tubercle large and outwardly projecting, the postero-lateral smaller but acute.

Elytra elongate, narrow; base with forward projecting tubercles at the ends of the first and third interstices; apex emarginate, rather briefly mucronate on each side; punctures moderately regular and distinct; with two rows of tubercles, first row with about 10, the first moderately large and acute, followed by about 7 smaller, closely set, obtuse tubercles and then with three larger more conical tubercles, the last being strongly spiniform; second row with 6-7 erect spiniform tubercles, the first and the last two rather longer than the others, the apical descending to a lower level than the apical tubercle of first row; seventh interstice with a single infra-humeral spine.

Venter moderately densely clothed with brown, with traces of a white median vitta. Legs elongate, slender.

♀. Head, rostrum and prothorax similar to ♂. Elytra broader, more rounded; tubercles greatly debased, those on third interstice forming a slightly raised ridge, the component tubercles only traceable at the two ends, the apical tubercle moderately strong; fifth interstice with 7-8 tubercles, all distinct but much smaller than in ♂.; infra-humeral spine small and granuliform. Venter convex.

*Dimensions*: ♂. 9.5 x 3.5 mm.; ♀. 10 x 4 mm.

*Hab.*—South Australia: Port Lincoln.

*H. bicornutus* may be distinguished from its congeners by the almost complete absence of the basal rostral spines, which are represented merely by two granules. Described from specimens (? types) in Macleay Museum.

NEOHYBORRHYNCHUS, n.g.

Genotype—*Hyborrhynchus rugosus* Mael.

Elongate, narrow species, allied to *Hyborrhynchus*.

Head convex, front rugose, with supraorbital ridges, not tubercles. Rostrum separated from head above by a transverse impression; upper surface deeply excavate, the clypeal plate inserted between the ends of the external margins. Scrobes extending back to anterior margin of eyes. Eyes rotundate, moderately coarsely faceted. Prothorax longer than wide, convex, without lateral tubercles. Elytra elongate, strongly transversely convex; base contained between the pro-

jeeting ends of the third interstices; with three isolated tubereles on each elytron, situated posteriorly.

Other characters as in *Hyborrhynchus*.

The species *H. rugosus* Mael., for which this genus is proposed differs so widely from the other species included in *Hyborrhynchus*, that I cannot regard it as congeneric with them. The absence of tubereles on head and rostrum, the position of the clypeal plate, the shape of the prothorax and the arrangement of the few isolated elytral tubereles all form points of distinction. At the same time it appears to be more nearly allied to *Hyborrhynchus* than to any other genus, and the rugosities of the head correspond in position to the tubereles of *Hyborrhynchus*.

Only the one species is so far known, and like most of the other species of the group, this is found in the south-western corner of the continent.

NEOHYBORRHYNCHUS RUGOSUS (Mael.)

*Hyborrhynchus rugosus*, Macleay, Trans. Ent. Soc. N.S. Wales, i., 1865, p. 298.

♂. Elongate, narrow. Black, densely clothed with brown depressed pubescence; with lighter setae on head and prothorax.

Head with upper surface convex and somewhat rugose, an oblique ridge on each side of median ridge convergent on base of rostrum; a raised ridge on each side above eyes. Rostrum separated from head above by a rather lightly impressed sinuate line; upper surface concave, the concavity narrowed behind by the approximation of the internal ridges, the latter long and prominent; lateral margins raised in a distinct, though not high, ridge, not tuberculate nor angulate, separated from the internal ridges posteriorly by an elongate basal fovea. Antennae elongate, slender; funicle with second joint longer than first; club moderately long, not pedunculate. Eyes briefly ovate.

Prothorax longer than broad, widest anteriorly and somewhat narrowed to base; apical margin slightly produced above and with feeble ocular lobes; disc with well-marked subapical constriction; median line impressed; set with rather irregular, obscure granules.

Elytra elongate, slightly widened posteriorly; base with rather strong forward projections at ends of first and third interstices, width across outermost equal to width of base of prothorax; disc with punctures narrow, transversely confluent, separated by transverse rugae, giving the derm a wrinkled appearance; third interstice raised and culminating in a large acute tubercle above declivity; fifth with two tubereles, smaller than the one on the first, and situated anterior and posterior to it.

Venter flat, with scattered light-coloured setae. Legs simple.

♀. Similar but larger and broader; elytral tubereles slightly smaller. Venter convex.

*Dimensions*: ♂. 12 x 4 mm.; ♀. 15 x 5.5 mm.

*Hab.*—Western Australia: King George Sound.

The elongate, strongly transversely convex form, and the three isolated tubereles above the declivity on each elytron render this species readily recognisable.

PARAHYBORRHYNCHUS, n. g.

Genotype—*Acantholophus convexiusculus* Mael.

Small, much broader across elytra than across prothorax.

Head separated from rostrum by a transverse sulcus; supraorbital crests present, single, erect. Rostrum deeply excavate above, lateral margins tuber-



culate; clypeal plate more or less sunken, not exerted; submentum with median forwardly projecting lobe. Scrobes short, straight, ending some distance in front of eyes. Eyes rotundate, rather coarsely faceted. Prothorax shaped much as in *Hyborrhynchus*; anterior margin produced slightly, without ocular lobes; disc with a row of tubercles on each side of median area; lateral margins tuberculate. Elytra very broad; suddenly narrowed to base, which is contained between the projecting ends of the third interstices; apex rounded, not emarginate nor mucronate; disc striate-punctate; interstices granulate. Venter more or less flattened in ♂, convex in ♀. Legs moderately long; tarsal joints short.

The present genus is proposed for the reception of two species—*Acantholophus convexiusculus* Mael. and *Hyborrhynchus crassiusculus* Mael.

The position of the former of these has been a good deal questioned. Macleay described the species as an *Acantholophus*, but subsequently in describing *mastersi*, which is certainly not specifically distinct, he placed it under *Hyborrhynchus*. Lea (Trans. Roy. Soc. S. Aust., 1903, p. 112) in recording the above synonymy, states that the species belongs to the same genus as *Cubicorrhynchus spinicollis* Mael. With this I do not agree, and in revising the genus *Acantholophus* I tentatively referred *A. convexiusculus* to *Hyborrhynchus*. It seems better now to form a new genus for it and for *H. crassiusculus* which is congeneric.

*Parahyborrhynchus* differs from *Hyborrhynchus* in its shorter broader form, in the more deeply set clypeal plate, and in the short scrobes. The shape of the rostrum is also somewhat different but the difference is scarcely definable. The two species may be separated thus:

Supraorbital crests large and conspicuous . . . . . *P. convexiusculus* Mael.  
Supraorbital crests granuliform; with a pair of frontal granules, not quite in the same line . . . . . *P. crassiusculus* Mael.

#### PARAHYBORRHYNCHUS CONVEXIUSCULUS (Mael.)

*Acantholophus convexiusculus* Mael., Trans. Ent. Soc. N.S. Wales, i., 1866, p. 330; Lea, Trans. Roy. Soc. S. Aust., 1903, p. 112.

♂. Small, narrow across prothorax, broad across elytra, strongly convex. Black; rather densely clothed with brown depressed pubescence, with traces of greyish vitta on elytra.

Head somewhat rugulose above, with a short noduliform ridge somewhat obliquely set on each side of middle, with indications of an almost obsolete median ridge; supraorbital crests large, trianguliform, rather obtuse, projecting forwards and upwards and slightly outwards. Rostrum short and wide, rather deeply excavate above, external margins strongly raised in a large obtuse tubercle, sinking to base and apex; internal ridges low, convergent to base. Antennae slender; funicle with second joint longer than first, other joints short; club short, not pedunculate. Eyes small, rotundate.

Prothorax broader than long, the anterior margin slightly produced above; median area moderately deeply depressed; submedian tubercles 4 in number on each side, small, erect, obtuse; lateral margins with a single, large, outwardly projecting tubercle, slightly in front of middle, and with a small granule near posterior angle.

Elytra much wider than prothorax, broadly ovate, strongly declivous posteriorly; base with strong forward projecting tubercles at ends of first and third interstices; width across the outer of these equal to width of base of prothorax; disc with rows of fairly definite punctures; the interstices granulate, the granules more marked on the posterior portions of the third and fifth interstices, which appear feebly raised; fifth and seventh interstices with small nodules at base.

Venter feebly transversely convex, with scattered dark setae, and faint traces of median and lateral vittae.

♀. Very similar, somewhat more convex and obese; venter more strongly convex.

*Dimensions*: ♂. 9 x 4 mm.; ♀. 10 x 5 mm.

*Hab.*—N.S. Wales: Shelley's Flat (Goulburn), Sydney, Portland, Capertee; Victoria: Wandong, Mt. Evelyn; S. Australia; W. Australia.

The above description is taken from the types in the Macleay Museum. The species varies somewhat in the rugosities of the head and in the development of the elytral granules.

P. CONVEXIUSCULUS var. MASTERSI Macl.

*Hyborrhynchus mastersi*, Macl., Trans. Ent. Soc. N.S. Wales, i., 1866, p. 334.

Very close to *P. convexiusculus*.

Head with submedian ridges shorter and mere nodules; supraorbital crests slightly smaller, the space between less depressed. Rostrum similar. Antennae with all the joints of the funicle longer and more slender, the club much longer, with an elongate peduncle. Prothorax with median area deeply grooved in centre; submedian tubercles rather smaller. Otherwise as in *convexiusculus*.

*Dimensions*: ♂. 9 x 4 mm.; ♀. 10 x 4.5 mm.

*Hab.*—South Australia, Fort Lincoln.

The above description is taken from the specimens in the Macleay Museum. The differences noted when compared with the types of *P. convexiusculus* become of less importance when a series from various localities is examined. Even the differences in the length of the joints of the funicle do not appear to be constant in South Australian specimens, and it might be better to follow Lea in sinking *mastersi* as an absolute synonym of *convexiusculus*.

PARAHYBORRHYNCHUS CRASSIUSCULUS Macl.

Macleay, Trans. Ent. Soc. N.S. Wales, i., 1866, p. 334.

♂. Allied to *P. convexiusculus* Macl.; comparatively broad, elytra parallel-sided. Black; densely clothed with brown and golden brown pubescence, variegated with grey on elytra; setae long, dark.

Head convex, with small, granuliform frontal and supraorbital tubercles, about equal in size, the frontals slightly posterior to the supraorbitals. Rostrum wide, upper surface deeply and widely excavate, the lateral margins raised in middle into a strong rectangular tubercle; with two small, granuliform, basal tubercles, rather widely separated. Antennae slender; funicle with first two joints subequal; club with elongate base. Eyes subrotundate, coarsely faceted.

Prothorax with apical margin slightly produced above, without ocular lobes; disc broad, explanate, with median line impressed in anterior half, obscurely carinate posteriorly, with small somewhat sparsely set granules; submedian tubercles small, obtuse, irregularly arranged; lateral margins bituberculate, the anterior tubercle large and triangular, outwardly projecting, the posterior smaller, less acute.

Elytra comparatively broad, sides parallel for the greater portion of their extent; apex rounded, not emarginate nor mucronate; base with forwardly projecting processes at ends of the first three interstices; disc with moderately well defined rows of punctures, often laterally confluent; third interstice outwardly turned at base to join humeral angle; all the interstices with small, closely set, setigerous granules, more conspicuous on third, fifth and seventh

and becoming larger posteriorly; infra-humeral tubercle on seventh very slightly longer than the granules on basal portion of interstice.

Venter feebly depressed at base with intermediate segments comparatively short; the apical segment rather coarsely punctured, the whole with pale decumbent setae. Legs simple.

♀. Similar, elytra wider, more rounded, with apex more produced; granules smaller, less distinct. Venter strongly convex.

*Dimensions*: ♂. 11 x 4 mm.; ♀. 12 x 5 mm.

*Hab.*—Western Australia: King George Sound.

Closely allied to *P. convexiusculus* Mael., the present species may be distinguished by the smaller supraorbital crests, which are hardly more than granules, and are set slightly anterior to the frontal granules so that the head presents a transverse row of 4 granules across the front. The postero-lateral tubercle of the prothorax is also definitely developed.

The median lobe of the submentum is in this species very broad and but little advanced, so that from some positions the emargination appears straight.

The above description was taken from the types in the Australian Museum.

#### ANASCOPTES.

Pascoe, Journ. Linn. Soc., xii., 1873, p. 7.

Genotype—*A. muricatus* Pasce.

Head concave in front; not distinctly separated from upper surface of rostrum; supraorbital tubercles present. Rostrum with upper surface hardly excavate, somewhat concave at base; lateral margins feebly angulate, hardly definitely tuberculate anteriorly; basal tubercles present; clypeal plate exerted. Scrobes short, commencing hardly farther forward than the middle of the rostrum and extending to the inferior border of the eye. Antennae with scape moderately long. Eyes round, prominent, coarsely faceted. Prothorax angulate or tuberculate on each side; anterior margin produced above, without ocular lobes; disc with submedian tubercles separating median and sublateral areas. Elytra oval; base contained between the projecting ends of the third interstices. Ventral surface flattened. Legs simple; tarsi short.

The type species was examined at the British Museum, and a detailed description made. I now add two new species to the genus, one of which has sometimes been identified as Pascoe's species. All three species are from Western Australia.

In his table of the long-scaped *Amycterinae* (*loc. cit.*, p. 21) Pascoe placed *Anascoptes* with *Polycreta*, distinguishing both from *Hyborrhynchus* by the narrow rostrum.

I do not think however that *Polycreta* is really related to *Anascoptes*. The genus is hardly separable from *Ennothus* which was placed by Pascoe among the short-scaped *Amycterinae* (*Euomides*), and both genera seem more closely allied to *Oditesus*.

Further consideration of *Polycreta* is therefore deferred for the present.

*Anascoptes* appears to me more nearly allied to *Hyborrhynchus* than to the *Euomides*, the relation of the base of the elytra to the prothorax being the same in the two genera.

*Anascoptes* is however separated from the other three genera of the group by the upper surface of the rostrum not being deeply excavate, though it may be shallowly concave, particularly between the basal tubercles. In the type species (*A. muricatus* Pasce.) these basal tubercles are widely separated and

apparently situated on the external margins; in the two new species herein described these tubercles are approximated and internal to the margins. It might be questioned whether this difference should not be regarded as of generic importance, but one of the two new species is otherwise very similar to the type species though the other differs rather widely in general appearance.

The three species may be distinguished by the following table:

1	(4)	Strongly tuberculate species.		
2	(3)	Basal rostral tubercles widely separated	... ..	<i>A. muricatus</i> Pasc.
3	(2)	Basal tubercles approximated	... ..	<i>A. fasciatus</i> , n.sp.
4	(1)	With obliterate sculpture, the tubercles obsolescent	... ..	<i>A. obtiteratus</i> , n.sp.

#### ANASCOPTES MURICATUS Pasc.

Paseoe, Journ. Linn. Soc., xii., 1873, p. 7, Pl. ii., f. 6.

Elongate, comparatively broad across elytra, small. Black; with dingy brown clothing.

Head concave in front, not separated from rostrum by a sulcus; with an erect spine on each side above eye. Rostrum comparatively short and broad, with an erect spine or crest on each side of base at lateral margin, slightly outwardly projecting; dorsal surface concave between crests, then sloping downwards and forwards to apex; scrobes short ending opposite anterior margin of rostral crests. Antennae with scape moderately long, fairly stout. Eyes prominent, coarsely faceted.

Prothorax comparatively narrow, the width across base hardly equal to width of elytra across the third interstices; lateral margins strongly angulate in front of middle, then sloping to base and apex; apical margin rather strongly produced above, ocular lobes absent; median line depressed throughout, bordered on either side by erect, conjoined tubercles, these forming short parallel crests in anterior portion, and basally convergent crests from middle to base; rest of surface non-tuberculate.

Elytra very broad, subparallel on sides; base formed by the portion between the projecting ends of the third interstices; first interstee with a raised crest on each side of scutellar region, divergent, forwardly projecting; third and fifth interstices curved with convexity inwards, each with a row of rounded tubercles, becoming larger posteriorly and basally, not reaching base and not extending down declivity; seventh interstee with an infra-humeral tubercle, followed by a row of small tubercles, all contained within the curve of the fifth interstee. Under-surface flattened. Tarsi short.

*Dimensions:* Long. 3 lin. (Paseoe).

*Hab.*—Western Australia: Albany.

The above description was drawn up from the type specimen in the British Museum; no measurements were however made, so the length given by Paseoe is quoted.

No notes were made on the relation of the posterior end of the scrobe to the eye; Paseoe describes the scrobe as running below the eye, reference to his figure shows that the position is not essentially different from that described for the following species, the interpretation of anterior and lower depending on the position of the head. In the generic diagnosis Paseoe describes the rostrum as trituberculate; this is hardly correct, the three tubercles are shown in the figure but the basal one really represents the supraorbital crest, while the anterior is hardly more than a slight angulation.

Since the above notes were written I have had an opportunity of examining a specimen of this species from Mr. A. M. Lea's collection. The scrobe is strongly curved downwards in front of the eye; as the head is bent downwards the relative position of the scrobe is below the eye, thus corresponding with Pascoe's figure. The species can be readily separated from the following by the position of the basal tubercles of the rostrum and by the more acute tubercles both on prothorax and elytra. The size is smaller (5.5 x 2 mm.). The position of the head renders a view of the submentum difficult, the median lobe can however be seen from certain directions, though it appears to be shorter than in the other two species.

ANASCOPTES FASCIATUS, n. sp.

♂. Small, elongate. Black; rather sparsely clothed with fine greyish subpubescence, a denser fascia across base and one above declivity.

Head not definitely separated from rostrum above; with a strong, erect, rather obtuse tubercle above each eye. Rostrum short, broad, not excavate, external margins not raised, divergent basally, with a small prominence, hardly a definite tubercle, over insertion of antennae; with two strong tubercles at extreme base, anterior and internal to the supraorbital tubercles, and separated by a fairly deep sulcus. Scrobes strongly curved, extending to lower margin of eyes. Antennae with rather short, moderately incrassate scape; funicle with second joint distinctly longer than first. Eyes rotundate, rather coarsely faceted.

Prothorax pentagonal in shape, the apex rather strongly produced over the head, without ocular lobes; median area depressed, with a deeper line in centre, bordered on either side by a series of tubercles, conjoined into a distinct ridge, the anterior tubercle projecting over the head, the middle tubercle the largest and situated more outwardly; lateral margins with a strong outwardly projecting tubercle anterior to middle, followed by a definite ridge, slightly inwardly directed, to base; sides with three vertical impressions above, non-granulate.

Elytra considerably wider than prothorax, the width across the third interstices at base equal to width of base of prothorax; sides subparallel in median portion, obliquely truncate at base; base with strong forwardly projecting tubercles at ends of first and third interstices; disc with rather large punctures, separated by non-granulate ridges; first interstice non-granulate, with a single basal tubercle; third interstice curved outward at base and towards apex, with a double humeral tubercle, projecting forwards, followed by a row of about 6 tubercles, small granuliform towards base, becoming larger towards apex, the last large and conical, situated at top of declivity; fifth interstice outwardly curved towards base and apex, with a forward projecting tubercle anteriorly, but posterior to basal tubercle of the third interstice, followed by about 6 tubercles, the basal ones small, the apical larger and more conical, the penultimate the largest, but smaller than apical tubercle of third interstice, the last situated about half-way down declivity; seventh interstice with a single infra-humeral tubercle. Sides non-granulate.

Venter rather closely pubescent, without median vitta, flattened; intermediate segments short; apical segment with a rather shallow apical transverse depression.

Tarsi short, rather strongly setose; under surface of joints rather densely pubescent.

*Dimensions*: ♂. 7 x 3 mm.

*Hab.*—Western Australia: Mt. Barker (A. M. Lea).

In general appearance resembling *A. muricatus*, the present species can be

at once distinguished by the position of the basal rostral tubercles—closely approximated in *A. fasciatus*, widely separated in *A. muricatus*.

The median lobe of the submentum is a strong tongue-like process projecting far into the oral aperture.

(Holotype ♂ in author's collection).

*ANASCOPTES OBLITERATUS*, n. sp.

Small, broad; in general appearance resembling *P. convexiusculus* Mael. Black; densely clothed with fine dingy subpubescence.

Head convex, front somewhat flattened; with moderately large obtuse noduliform supraorbital crests. Rostrum not distinctly separated from the head; upper surface not excavate, clypeal plate exerted; lateral margins very feebly obtusely angulate about middle of rostrum, becoming indistinct towards apex and divergent towards base, where the margins run into the base of the supraorbital tubercles; upper surface with a pair of moderately large separate tubercles at junction with head. Scrobes not reaching farther forwards than middle of rostrum, and posteriorly curved down in front of eyes. Antennae with scape rather strongly incrassate at apex; funicular joints short, first and second subequal; club short, stout. Eyes small, round, rather coarsely faceted.

Prothorax slightly produced above, without ocular lobes; upper surface somewhat flattened; median area rather shallowly depressed; submedian tubercles obsolescent, practically fused to form a somewhat rugose, feebly raised ridges, broad in the middle, narrow at each end, especially the anterior; lateral margins dentate, hardly explanate, with a short obtuse tubercle slightly anterior to middle.

Elytra short and broad; base contained between the ends of the third interstices, with short forward projections at the ends of the first and third interstices; sculpture much obliterated, the punctures barely traceable; the third, fifth and seventh interstices feebly elevated, without definite granules or tubercles except for one or two obsolete nodules on the third and fifth near declivity, and an obtuse infra-humeral nodule on the seventh. Venter flat, feebly depressed at base; with rather large, round, scattered punctures. Legs comparatively short, posterior tarsi short.

*Dimensions*: ♂. 6.5 x 3 mm.

*Hab.*—Western Australia (H. J. Carter).

I place this species in *Anascoptes* with a great deal of hesitation. It has the general appearance of *P. convexiusculus* Mael., and a rostral sculpture similar to that of *A. fasciatus*. Possibly a new genus should have been erected to receive it, but I am unwilling to do this until more specimens are available.

Holotype ♂ in author's collection.